

**GREY CLOUD ISLAND TOWNSHIP
ORDINANCE NO. 52
SOLAR ENERGY ORDINANCE**

AN ORDINANCE ADDING STANDARDS AND DEFINITIONS FOR SOLAR ENERGY SYSTEMS AND FOR THEIR INSTALLATION AND USE IN GREY CLOUD ISLAND TOWNSHIP

- A. Purpose and Intent.** The Township supports the use of solar collection systems, including development of solar energy gardens. It is the intent of the Township with Ordinance No. 52 to create standards for the reasonable capture and use of solar energy.
- B. Applicability.** These regulations are for all solar energy systems on properties and structures under the jurisdiction of Grey Cloud Island Township. Solar gardens that would generate more than five (5) megawatts (MW) of power require approval from the Minnesota Public Utilities Commission (PUC).
- C. Definitions.** The following words, terms, and phrases, when used in Ordinance No. 52, shall have the meaning provided herein, except where the context clearly indicates otherwise:
1. **Solar Overlay District (Refer to Figure 1.):** Includes Property Identification Numbers as follows: 25.027.22.221.0001, 25.027.22.21.0005, 25.027.22.21.0004 and that portion of 25.027.22.21.0002 that is roughly west of the township cemetery to Grey Cloud Island Drive and north of Pioneer Road South to the property line to the north boundary of Property Identification Number 25.027.22.21.0005
 2. **Co-located:** A solar system that exhibits characteristics of a single development, including, but not limited to common ownership structure, an umbrella sale arrangement, a revenue sharing arrangement or common debt and equity financing.
 3. **Community Solar Energy Systems (Solar Gardens):** A solar garden is a solar electric array with multiple subscribers (participants) connected to the utility grid. Community Solar Energy Systems are only permitted in the Solar Overlay District and that contains less than 5 MW (AC) of solar substation capacity, including co-located facilities in the aggregate at a given project site.
 4. **Building-integrated Solar Energy Systems:** An active solar system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include, but are not limited to, photovoltaic or thermal solar systems that are contained within roofing materials, windows, skylights, and awnings.

5. **Ground-mounted Panels:** Solar panels mounted to the ground by use of stabilizers or similar apparatus.
6. **Photovoltaic System:** An active solar energy system that converts solar energy directly into electricity.
7. **Roof or Building-Mounted Solar Energy System:** Solar energy system (panels) that are mounted to the roof or building using brackets, stands, or other apparatus.
8. **Solar Access:** A view of the sun, from any point on the solar collector surface that is not obscured by any vegetation, building or object located on parcels of land other than the parcel upon which the solar collector is located, between the hours of 9:00 a.m. and 3:00 p.m. standard time on any day of the year.
9. **Solar Collector:** A device, structure, or part of a device or structure that the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy.
10. **Solar Energy:** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
11. **Solar Energy System (SES):** An active solar energy system that collects and/or stores solar energy and transforms solar energy into another form of energy or transfers heat from a collector to another medium using mechanical, electrical, thermal, or chemical means.
12. **Solar Farm:** A commercial facility that converts sunlight into electricity, whether by photovoltaic (PV), concentrating solar thermal (CST) devices, or other conversion technology, for the primary purpose of selling generated electricity and that contains more than 1MW (AC) of solar substation capacity, including co-located facilities in the aggregate at a given project site.
13. **Solar Hot Water System:** A system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.

D. Types of Solar Energy Systems

1. **Rooftop solar energy systems and building-integrated solar systems:** accessory to the primary land use, designed to supply energy for the primary use.
 - a. These systems are permitted accessory uses in all districts in which buildings are permitted.
 - b. No Township Conditional Use Permit is required.

- c. The owner or contractor shall receive a building and/or mechanical permit before installing a rooftop solar energy system.
2. **Ground-mounted solar energy systems:** Ground-mounted solar energy systems are designed to supply energy for off-site uses on the distribution grid. These systems shall be subject to the following conditions:
- a. Ground-mounted systems require a Township Conditional Use Permit
 - b. Ground-mounted systems are not allowed outside the Solar Overlay District.
 - c. A storm water management plan is required. The Township does not consider the collector surface of a ground-mounted system as impervious surface.
 - d. The height of a ground-mounted system shall not exceed ten feet (10').
3. **Community solar energy systems (Solar Gardens) and building-integrated solar energy systems:** These systems shall be subject to the following conditions.
- a. Community solar energy systems (Solar Gardens) require a Township Conditional Use Permit.
 - b. Community solar energy systems are permitted only within the area designated as a Solar Overlay District.
 - c. Solar Farms are not permitted in the Township.
 - d. Foundations. The manufacturer's engineer or another qualified engineer shall certify that the foundation and design of the solar panels meets the accepted professional standards, given local soil and climate conditions.
 - e. An interconnection agreement must be completed with the electric utility in whose service territory the system is located.
 - f. All structures must meet the setback, height, and coverage limitations for the district in which the system is located.
 - g. Ground-mounted systems must meet all required standards for structures in the district in which the system is located.
 - h. Site Plan Required. The owner or operator shall submit to the Township a detailed site plan for both existing and proposed areas where solar arrays would be placed, the existing and proposed structures, height limitations, property lines, access points, screening, fencing, landscaping, surface water drainage patterns, wetlands, the ordinary high water mark for all

water bodies, any other protected resources, topography, electric equipment, and all other characteristics requested by the Township.

- i. **Power and Communication Lines.** Power and communication lines running between banks of solar collectors and to electric substations or interconnections with buildings shall be buried underground. The Township Board or their designee may grant exceptions to this requirement in instances where shallow bedrock, water courses or other elements of the natural landscape interfere with the ability to bury lines.
- j. **Decommissioning Plan.** The Township requires the owner or operator to submit a decommissioning plan for ground-mounted systems to ensure that the owner or operator properly removes the equipment and facilities upon the end of project life or after their useful life.

The owner or operator shall decommission and remove the solar panels in the event they are not in use for twelve (12) consecutive months. The plan shall include provisions for the removal of all structures and foundations, the removal of all electrical transmission components, the restoration of soil and vegetation, and a soundly-based plan ensuring financial resources will be available to fully decommission the site.

The disposal of structures and/or foundations shall meet all Township requirements and the requirements of the Washington County Solid Waste Ordinance. The Township also may require the owner or operator to post a performance bond, letter of credit or establish an escrow account to ensure property decommissioning and removal.

E. Additional Standards. In addition to the standards set forth above, all solar energy systems shall meet the following standards and shall require a building permit.

1. The owners or operators of electric solar energy systems that are connected to the electric distribution or transmission system, either directly or through the existing service of the primary use on the site shall obtain an interconnection agreement with the electric utility in whose service territory the system is located. Off-grid systems are exempt from this requirement.
2. Electric solar system components that are connected to a building electric system must have an Underwriters Laboratory (UL) listing.
3. All solar energy systems shall meet the standards of the Minnesota and National Electric Code.
4. All solar energy systems using a reflector to enhance solar production shall eliminate glare from the reflector that affects adjacent or nearby properties. Steps to eliminate glare nuisance may include selective placement of the system, screening of the solar array, reducing use of the reflector system, or other remedies that limit glare.

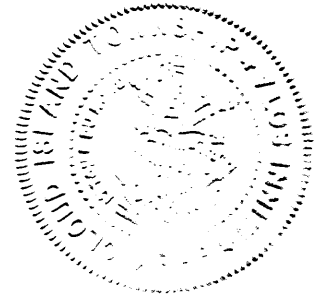
5. Aesthetic Conditions. The solar energy system must be attractively screened from view from public right-of-way and neighboring properties to the maximum extent possible while still allowing the system to achieve efficient performance.

Approved this 13th day of July, 2016, by the Board of Supervisors, Grey Cloud Island Township

Richard C Adams
Richard C. Adams, Chairman

Attest:

Elizabeth Bell
Elizabeth Bell, Clerk



Effective this 13th day of July, 2016.

FIGURE 1 ORDINANCE 52

Legend


- RR RURAL RESIDENTIAL: 1 DU PER 10 ACRES
- RL RURAL RESIDENTIAL - LOW DENSITY: 1 DU PER 7.5 ACRES
- RM RURAL RESIDENTIAL - MEDIUM DENSITY: 1 DU PER 5 ACRES
- RH RURAL RESIDENTIAL - HIGH DENSITY: 1 DU PER 2.5 ACRES
- C CONSERVANCY
- P PUBLIC
- RIVER
- EXISTING OR FUTURE MINING AS INTERIM USE
- MINING RESERVE (FUTURE MINING POSSIBLE)

Sanders Wacker Bergly, Inc. - Planning Consultants

Notes:

Base map data obtained from Washington County in 2007.

Intended for general planning purposes only.

 SOLAR OVERLAY DISTRICT (SOD)

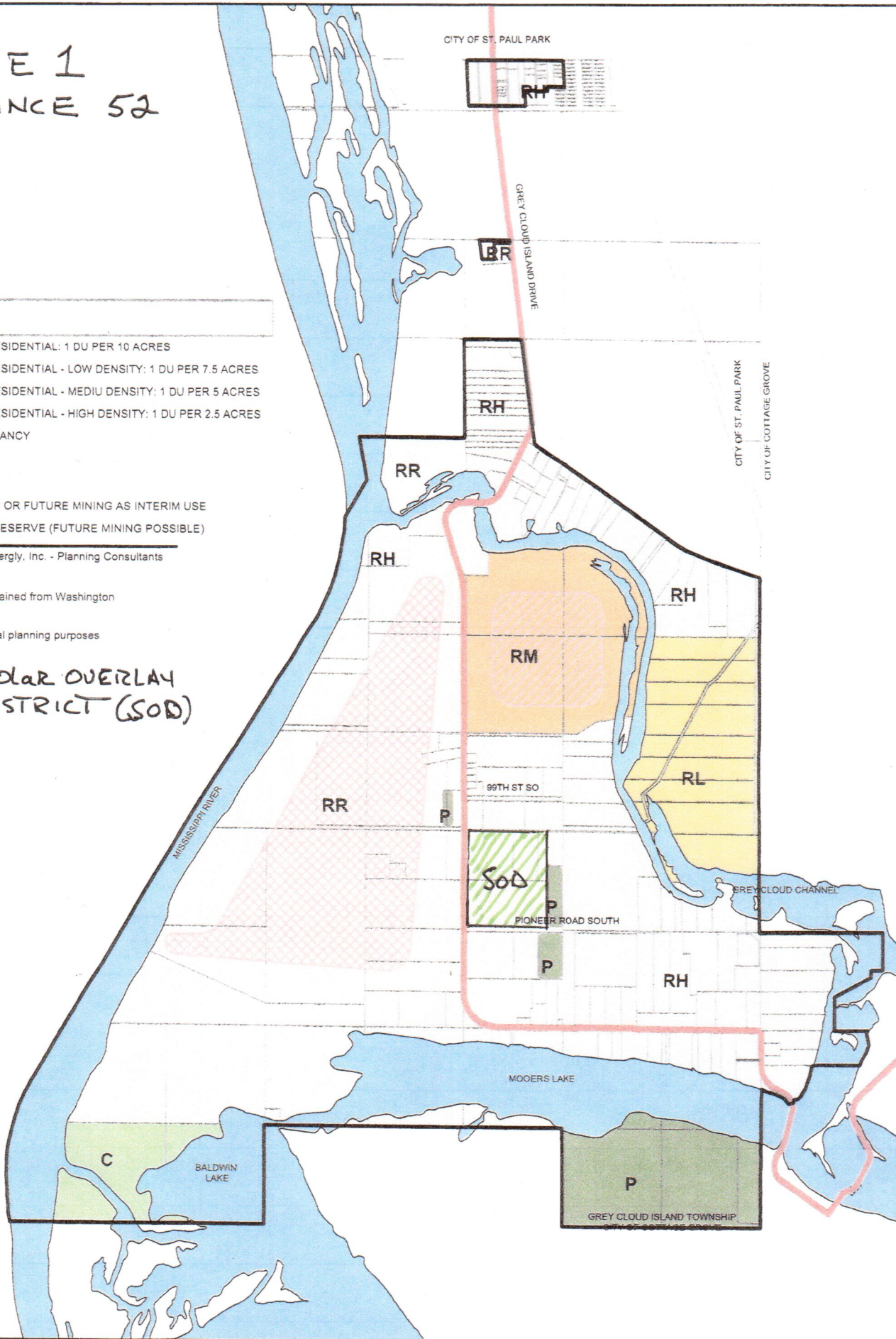


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